# Zach Khong Lap Hoe

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GitHub: <a href="https://github.com/multipletwigs">https://github.com/multipletwigs</a>

#### Education

Monash University Malaysia

Oct 2020 - July 2023

Bachelor's of Computer Science in Data Science

Kuala Lumpur, Malaysia

• 3.91 Cumulative Grade Point Average (CGPA)

- 86.125 Weighted Average Marks (WAM)
- Received Monash High Achiever Award (HAA) for 6 semesters in a row

Methodist College Kuala Lumpur

Jan 2019 - June 2020

Cambridge A-Levels Pure Science

3A\* and 1A for Biology, Physics, Chemistry and Math respectively

## Work Experience

## Freelance Software Engineer

Jan 2023 - April 2023

Sprintmaster - https://sprintmaster.io

Remote, United States

Techstack - Atlassian Forge (Node.js), Custom UI (React.js), TypeScript, TailwindCSS, Open AI API

- Worked with a senior engineer on the Proof-Of-Concept (POC) of an Al-Powered Jira Extension. Implemented a sprint goal generator for Jira sprints in Scrum Boards through Jira Forge API and researching impactful prompt engineering techniques leading to robust sprint goal generations
- Worked with experienced product designers on the team to implement marketing tools by creating a product landing page using Typedream and implementing a custom newsletter mailer by using SendGrid which improved product reach to consumers in the Jira Ecosystem.

#### Software Engineer Intern

Nov 2022 - Feb 2023

The Estée Lauder Companies Inc.

Kuala Lumpur, Malaysia

Techstack - Next.js, React, Node.js, TailwindCSS, Open Al Embeddings, Python, Pandas, Azure

 Developed several features for the Esteem web application, including a domain-sensitive Al chatbot using OpenAl's API. The Web App was deployed on Azure App Services. This chatbot significantly improved the accessibility of the company's knowledge base to consumers, resulting in an enhanced brand experience for customers.

- Performed market analysis based on 200 questionnaire feedback to understand the pain points of the ELC Consumer Market which lead to valuable insights being drawn to confirm the feasibility of the web application.
- Presented the solution to a global audience, including ELC's Global CIO, Michael Smith, along with brand managers across all of ELC's brands which initiated talks to implement the solution on a global level.

# **Selected Projects**

## **Software Engineering Lead (Funded by Monash)**

Nov 2021 - Feb 2023

Monash Malaysia UReview - https://monash.ureview.org/#/aboutus

Kuala Lumpur, Malaysia

Techstack - Angular, React, Chakra UI, Bootstrap, Django, DigitalOcean, Docker

- Lead a team of 3 student developers to revamp and implement a functional web application and dashboard called <u>Early Semester Student Feedback Survey</u> for Monash Malaysia that collects unit related feedback from over 1000 Monash Malaysia students which allows for simpler analysis of unit ratings by Monash Course Coordinators and Lectures.
- Streamlined the process of deploying our frontend and backend applications using Docker Containers and DigitalOcean Kubernetes Clusters which lead to near 0 downtime when rolling out latest Container Registry Images.
- Minimized deployment costs by 40% through thorough analysis of website traffic which prompted the migration of DigitalOcean services to cheaper and more suitable plans.

#### **Open Source Contributor**

Vercel/Satori - <a href="https://github.com/vercel/satori">https://github.com/vercel/satori</a>

Techstack - React.js, Node.js, TypeScript

- Solved a Good First Issue of unifying error messages for fetching image data with relative URLs on the server, streamlining the error identification and resolution process for developers.
- Enhanced the React editor on the Satori Playground to accept React-like objects for Satori, improving the versatility of the Satori Playground.
- Actively participated in discussions before creating PRs to ensure smooth collaboration with the repo owner and other collaborators.

#### **PoemTell**

OpenAl Powered Poem Generator - <a href="https://poemtell.vercel.app/">https://poemtell.vercel.app/</a>

Kuala Lumpur, Malaysia

Techstack - Next.js, TailwindCSS, Prisma, Open Al API

- Developed a fully functional AI powered poem generator as a demo during my internship period at Estee Lauder Companies as part of my internship requirements, which is to showcase knowledge learnt.
- Presented to an audience of other intern peers and supervisors on modern technology stacks which were used in PoemTell development.

## Hackathons

## **Dell Hack2Hire Hackathon (3rd Place)**

Nov 2022 - Dec 2022

Dell Malaysia

Cyberjaya, Malaysia

- Developed an Event CMS for Dell Malaysia to manage employee wellness activities using Next.js, Chakra UI, Prisma ORM and Supabase PostgreSQL DB under 24 hours based on a problem statement given a few days prior to the competition.
- Designed, and later on implemented an ERD Diagram with Prisma following the problem statement and requirements given by Dell along with a Figma mockup which allowed us to code fast on the event itself.
- Received 3rd place in the competition and was given a job offer at Dell as a Software Engineer from the event after presenting our solution to Dell Software Engineers.

Monash	QuickHack	Hackathon	(Top	6	Finalists)
Nov 2021 - Dec 2021					
MUMTECH,		Monash			Malaysia
Kuala Lumpu	r, Malaysia				

• Developed an MVP using Angular, SCSS and Firebase for a CRUD based parking application that allows you to book a parking space ahead of schedule.

# Languages

- English, Chinese and Bahasa Malaysia Fluent in both writing and verbal communication
- Cantonese Fluent in verbal communication